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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,173	12/08/2003	Peter Dwight Spohn	1035-04239	2894
34456	7590	05/04/2005	EXAMINER	
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			LEUNG, PHILIP H	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/730,173	Applicant(s) SPOHN ET AL.	
	Examiner Philip H Leung	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 22-33 and 36-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, 34, 35 and 40-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5-12-2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of claims 1-21, 34, 35 and 40-50 in the reply filed on 2-8-2005 is acknowledged. The traversal is on the ground(s) that there is no undue burden on the Examiner and the groups are not independent and distinct. This is not found persuasive because the separate search and examination of the combination and subcombination clearly increase time and put an undue burden. The combination and subcombination as groups are clearly restrictable as set forth in the requirement. The statement that "not independent and distinct" without any reasons or specific explanation is a mere conclusion without merit.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 22-33 and 36-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the reply filed on 2-8-2005.

3. It is suggested to rewrite claims 34 and 35 in independent form as claim 31 upon which this claims depend has been withdrawn from consideration as a result of the election.

4. The drawings filed 12-8-2003 are acceptable.

5. The use of trademarks in the claims, such as, Zircalloy in claim 5, MXD6 in claim 11, Kevlar in claims 17 and 39, etc. is objectionable. Removal of these terms and/or replacing them with proper generic terms from the claims is suggested.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-21, 34, 35 and 40-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson (US 2,839,651) or Uemura (JP 9-215605), in view of Guiles et al (US 6,056,844) or Stark et al (US 2002/0113066 A1) (both cited by the applicant).

Erickson shows a heating belt 10 formed of rubber with conductive members 11 embedded in the rubber materials so that it is inductively heated by heating unit 20 having an induction heating coil 25 (see Figures 3 and 4 and col. 2, line 33 – col. 3, line 46). It uses conductive cables 11 or wires (col. 4, lines 59-66) instead of particles as the inductively heatable material with the polymer material as the belt composite material. Uemura also shows a heating

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belt made of a steel band 7 covered with rubber sheet 33 to be heated by induction coil 13 for heating food objects 11 (see Figures 1, 5 and 6 and the English translation). Uemura uses a rubber-covered steel band as the belt instead of inductively heatable particles. Guiles shows an induction heating device using a susceptor material comprising a polymer material mixed with induction heatable particles including materials as shown in Figures 3 and 5 (see Figures 1, 3 and 5 and col. 2, line 41 – col. 3, line 27). Stark also shows an induction heating device using inductively heatable particles including materials, such as, SrF powders, in a polymer material as an induction susceptor (see Figures 1, 3, 5, 6 and paragraphs [0016], [0019]- [0022] and [0027]- [0034]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Erickson or Uemura to use inductively heatable particles with the polymer material of the belt for better heating temperature control and more uniform heating result, in view of the teaching of Guiles or Stark. The exact material of the particles and composition of the belt susceptor material would have been a matter of engineering variations of all the examples shown in Guiles or Stark following their teaching (see Guiles, col. 41 – col. 2, line 19 and Stark, paragraphs [007] – [0018]).

8. Claims 10, 15, 34, 35 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson (US 2,839,651) or Uemura (JP 9-215605), in view of Guiles et al (US 6,056,844) or Stark et al (US 2002/0113066 A1), as applied to claims 1-9, 11-14, 16-21 and 40-49 above, and further in view of Kinouchi et al (US 6,087,641) (cited by the applicant).

Erickson or Uemura shows the belt is formed of rubber. It does not specifically state that the rubber is of silicone rubber. Kinouchi shows an induction heating device using an

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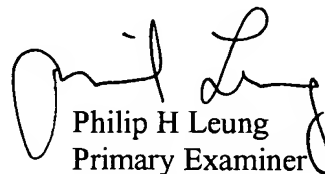
inductively heatable belt formed of a ferromagnetic metallic material with a silicone rubber coating (see Figures 1 and 2 and col. 4, line 33 – col. 5, line 11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Erickson or Uemura to use any type of rubber material as the cover layer of the belt including silicone rubber for better adhesion prevention, in view of the teaching of Kinouchi.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Garbini et al (US 3,883,386), Palmgren et al (US 6,045,648) and Chu et al (US 6,048,599) are further cited to show induction heating devices with similar claimed features.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (571) 272-4782. The examiner can normally be reached on flexible.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
4-15-2005